

131965

SAMPLING PLAN  
MIDDLETOWN AIR FIELD  
FOR MAY 26, 1987

LOCATION

Sampling is to be done on 5/26/87 at Harrisburg International Airport, which for purposes of this sampling effort will be referred to as Middletown Air Field. Samples will be taken from all wells which are proposed to be sources for the municipal water supply after construction of the DER permitted treatment system. Wells to be sampled are wells # 2,3,4,5,6,9,11,12, and 13. Access to wells 2-5 is from well pits; the remainder are at ground level.

PURPOSE

Samples are being taken to obtain data on contaminant parameters for which no previous data is available. This information will be used either to support an EPA Superfund Operable Unit Record of Decision (ROD) for the proposed municipal water supply treatment system, or to refute the treatment system as an appropriate remedial alternative for the operable unit (the municipal water supply).

TYPE OF SAMPLES

All wells will be sampled for HSL parameters, including volatile organics, base/neutral/ acid extractable organics, metals and cyanide.

SAMPLING TEAM

The sampling team will consist of the following members with the following duties:

Lori Davis-Team Leader- PA DER, Bureau of Waste Management co-ordination and overseeing of the sampling effort, and making necessary documentation.

Richard Morgan-PA DER, Bureau of Community Environmental Control - well sampling.

Francisco Barba- US EPA - conducting field tests including: air and sample temperature; sample pH and standard conductivity; and air sampling (see "Safety Precautions").

Donna McCartney- US EPA - insure that sample tags are signed by sampler; check information on tags and bottles; tag all containers; initiate chain of custody sheets.

SAMPLING PROCEDURE

All the wells in question have faucets at the well head from which samples will be obtained.

Purging of the wells will not be necessary as all are presently used to supply water for the existing water system or for industrial purposes. The faucet lines will be purged prior to sampling to remove "stale" water.

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A water sample from each well will be field sampled for temperature, pH, and standard conductivity.

Field filtering will not be conducted.

Sampling protocol from DER's September 1984 "Field Operating Procedures" will be followed.

Samples taken at each well will be: 3 VOA's, 2 half gallons, and 2 poly bottles, one fixed for metals with HNO<sub>3</sub>, the other fixed for CN with NaOH. The samples for well 13 will be duplicated, and duplicate half gallons will be taken at well 11. A field blank will be poured before sampling of the final well, and a trip blank will be carried along with samples throughout the effort.

Samples will be cooled after collection and will be packed in vermiculite and iced for shipment.

Chain-of-custody procedures will be followed. Coolers will be wrapped with fiber tape, and custody seals will be applied so as to identify tampering.

#### SAFETY PROCEDURES

Disposable gloves will be used when sampling, and will be changed between wells to avoid possible cross contamination.

The TIP photoionization detector will be used to monitor the air in the well pits prior to entering and after purging of the faucet lines. Based on the hazard levels of volatile organics previously identified, canister masks with filters for organic gases will be worn to enter pits and to sample if TIP readings are 5ppm or more above background levels. If readings are above 500ppm, samples will not be obtained from that point.

#### CHAIN OF CUSTODY

Bottles will be marked with the sample location, and tags with unique custody numbers will be attached to each bottle, except that one tag is wrapped around the VOA bottles for each sample. Tag numbers will be listed on the Custody Sheet which accompanies the shipment. Coolers will be sealed and shipped by DHL.

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